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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,115	05/30/2001	Yong S. Chen	CLX-701	6532

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EXAMINER

CHORBAJI, MONZER R

ART UNIT PAPER NUMBER

1744

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,115

Applicant(s)

CHEN, YONG S.

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This non-final office action is in response to the RCE/Amendment received on 08/27/04

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flashinski et al (U.S.P.N. 6,031,967) in view of Barnhart (U.S.P.N. 6,413,476).

With respect to claims 10, 18 and 20-21, the Flashinski reference teaches a heat-regulating container (14) for dispensing insecticides (26) into an atmosphere including the following: a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir portion (22). See col.4, lines 34-37, which teaches that the entire container is made from one piece with projections in figure

5 extending from the interior surface of the unlabeled lower surface of the container.

The reservoir having a plurality of protuberances (the meaning of protuberances is equivalent to projections such that the Flashinski reference teaches using a series of leg-like projections in col.4, lines 21-23), a heating device (10) with a heating surface (12) at elevated temperature adapted to receive the heat-regulating container (14) and the protuberances defining several air gaps (col.4, lines 34-37) between the lower surface of the reservoir portion and the heating surface of the heating device (10) for regulating heat transfer from the heating surface (figure 4, 12) to the volatile material (figure 4, 26). The Flashinski reference heating means is through convection heating and fails to disclose that the protuberances are in direct contact with a heating surface in order to regulate the temperature of the volatile material in the container. The Barnhart reference discloses a container (3) whose bottom surface is in direct contact with the heating surface (6) in order to regulate the heat transfer from the heating surface to the volatile material (102) in the container. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of the Barnhart reference since such a substitution makes the heating surface closer to the insecticide material for faster dispensing.

With respect to claims 11-13, the Flashinski reference teaches a container with a series of leg-like projections (i.e., protuberances) such that the numbers and the heights of the projections is a matter of design choice that is well within the scope of the artisan.

With respect to claims 14-16, the Flashinski reference teaches the following: the closure means includes an impermeable film (col.3, lines 4-5), the closure means includes a semi permeable membrane (col.2, line 65) and the closure means includes a permeable membrane (col.2, line 65).

With respect to claim 17, the Flashinski reference teaches the container (22) includes a volatile insecticide material (26).

With respect to claim 19, the Flashinski reference teaches a series of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that indenting the unlabeled lower surface of the reservoir forms the projections from the lower surface of the reservoir in figure 5.

With respect to claim 22, the Flashinski reference teaches a series (uniformly-distributed) of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that the projections (30) extend from completely over the exterior bottom surface (32).

4. Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flashinski et al (U.S.P.N. 6,031,967) in view of Encyclopedia Britannica Online.

With respect to claims 10, 18 and 20-21, the Flashinski reference teaches a heat-regulating container (14) for dispensing insecticides (26) into an atmosphere including the following: a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir portion (22) having (col.4, lines 34-37 teaches that the entire container is made from one piece with projections 30A and 31A

in figure 5 extending from the interior surface of the unlabeled lower surface of the container) a plurality of protuberances (the meaning of protuberances is equivalent to projections such that the Flashinski reference teaches using a series of leg-like projections in col.4, lines 21-23), a heating device (10) with a heating surface (12) at elevated temperature adapted to receive the heat-regulating container (14) and the protuberances defining several air gaps (col.4, lines 34-37) between the lower surface of the reservoir portion and the heating surface of the heating device (10) for regulating heat transfer from the heating surface (figure 4, 12) to the volatile material (figure 4, 26). The Flashinski reference heating means is through convection heating and fails to disclose that the protuberances are in direct contact (conduction heating) with the hot surface in order to regulate the temperature of the volatile material in the container. The Encyclopedia Britannica discloses three known means of heating an object. Therefore, it would have been obvious to one having ordinary skill in the art to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of Encyclopedia Britannica since such a substitution result in moving the heat from one object directly to another object (Encyclopedia Britannica Online, line 13).

With respect to claims 11-13, the Flashinski reference teaches a container with a series of leg-like projections (i.e., protuberances) such that the numbers and the heights of the projections is a matter of design choice that is well within the scope of the artisan.

With respect to claims 14-16, the Flashinski reference teaches the following: the closure means includes an impermeable film (col.3, lines 4-5), the closure means

includes a semi permeable membrane (col.2, line 65) and the closure means includes a permeable membrane (col.2, line 65).

With respect to claim 17, the Flashinski reference teaches the container (22) includes a volatile insecticide material (26).

With respect to claim 19, the Flashinski reference teaches a series of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that indenting the unlabeled lower surface of the reservoir forms the projections from the lower surface of the reservoir in figure 5.

With respect to claim 22, the Flashinski reference teaches a series (uniformly-distributed) of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that the projections (30) extend from completely over the exterior bottom surface (32).

Response to Arguments

5. Applicant's arguments filed 08/27/2004 have been fully considered but they are not persuasive.

On page 7 of the Response, applicant argues that, "Applicant submits that the cited prior art does not teach or anticipate a flat container for use in an insecticidal vaporizer, the container having a bottom surface with a plurality of uniformly-distributed protuberances extending therefrom for direct contact with a heating surface." The examiner disagrees. The Flashinski reference discloses a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir

portion (22) having (col.4, lines 34-37 teaches that the entire container is made from one piece with projections 30A and 31A in figure 5 extending from the interior surface of the unlabeled lower surface of the container) a plurality of protuberances (the meaning of protuberances is equivalent to projections such that the Flashinski reference teaches using a series of leg-like projections in col.4, lines 21-23). The Barnhart reference discloses a container (3) whose bottom surface is in direct contact with the heating surface (6) in order to regulate the heat transfer from the heating surface to the volatile material (102) in the container. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of the Barnhart reference since such a substitution makes the heating surface closer to the insecticide material for faster dispensing.

On page 7 of the Response, applicant argues that, "Flashinski teaches that it is an advantage to eliminate contact between the heating surface and the insecticidal container, whereas the present invention provides for direct contact between the lower surface of the container and the heating surface." The Flashinski reference is applied for the structural limitations of the container and the protuberances extending thereof and not for direct contact with the heating surface. Such a feature is taught in the Flashinski reference.

On page 8 of the Response, applicant argues that, "Barnhart does not teach direct contact between the heating element and the reservoir portion of the container." The examiner disagrees. The Barnhart reference discloses that the reservoir (3) in figure 2 is

in direct contact with the heating surface (6) of the heating device, which is made up of 6 and 8. The heating surface (6) is heated by heating source (8). The instant claims do not recite the "heating element" limitation, instead, they recite the "a heating surface" limitation. The heating surface is the structure (6) in the Barnhart reference.

On page 8 of the Response, applicant argues that, "Nor does Barnhart teach a reservoir portion having a plurality of indentation or protuberances extending, for direct contact with a heating element." The Flashinski reference is applied for the direct heating feature and not for the reservoir limitations. Such features are disclosed in the Flashinski reference as previously explained above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.
7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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